UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

December 1966

PART II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

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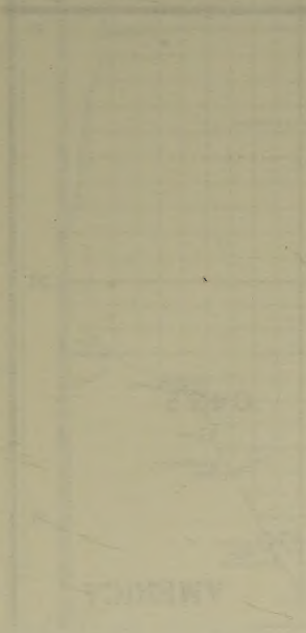
Bureau of Commercial Fisheries
Tuna Resources Laboratory
P. O. Box 271
La Jolla, California 92038

*Part 1 - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, Post Office Building, San Pedro, California



SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN

DECEMBER 1966

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Charts

Figure 1.--Mean sea surface temperatures (°F) derived from approximately 9000 observations. Squares show temperatures at weather ship stations. Numerals on shore are temperatures at coastal and lightship stations.

Figure 2.--Deviation of sea surface temperatures (°F) from long term charts of H.O. 225. Hatched areas are colder in 1966.

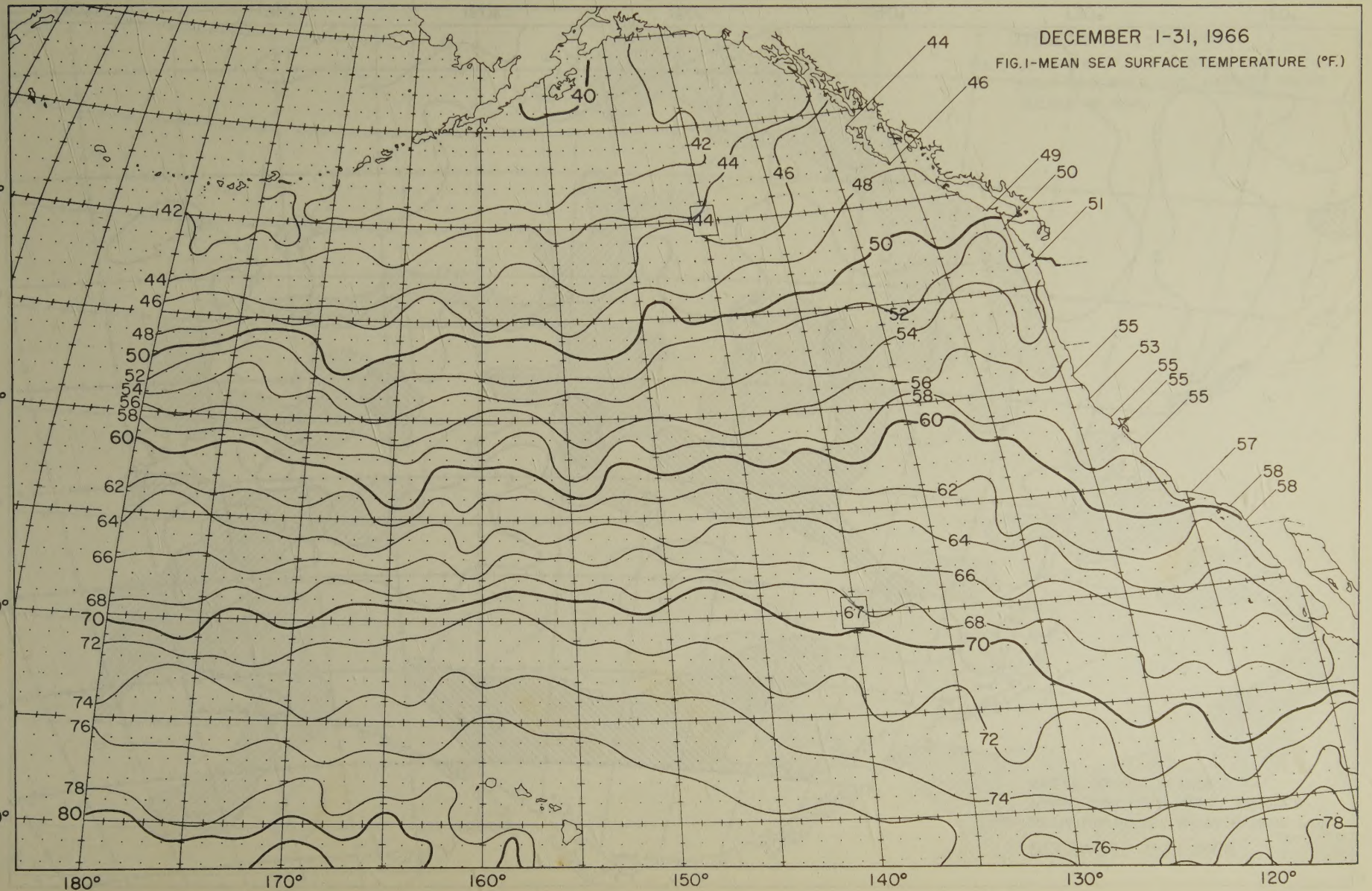
Figure 3.--Deviation of sea surface temperatures (°F) from those of December 1965. Hatched areas are colder in 1966.

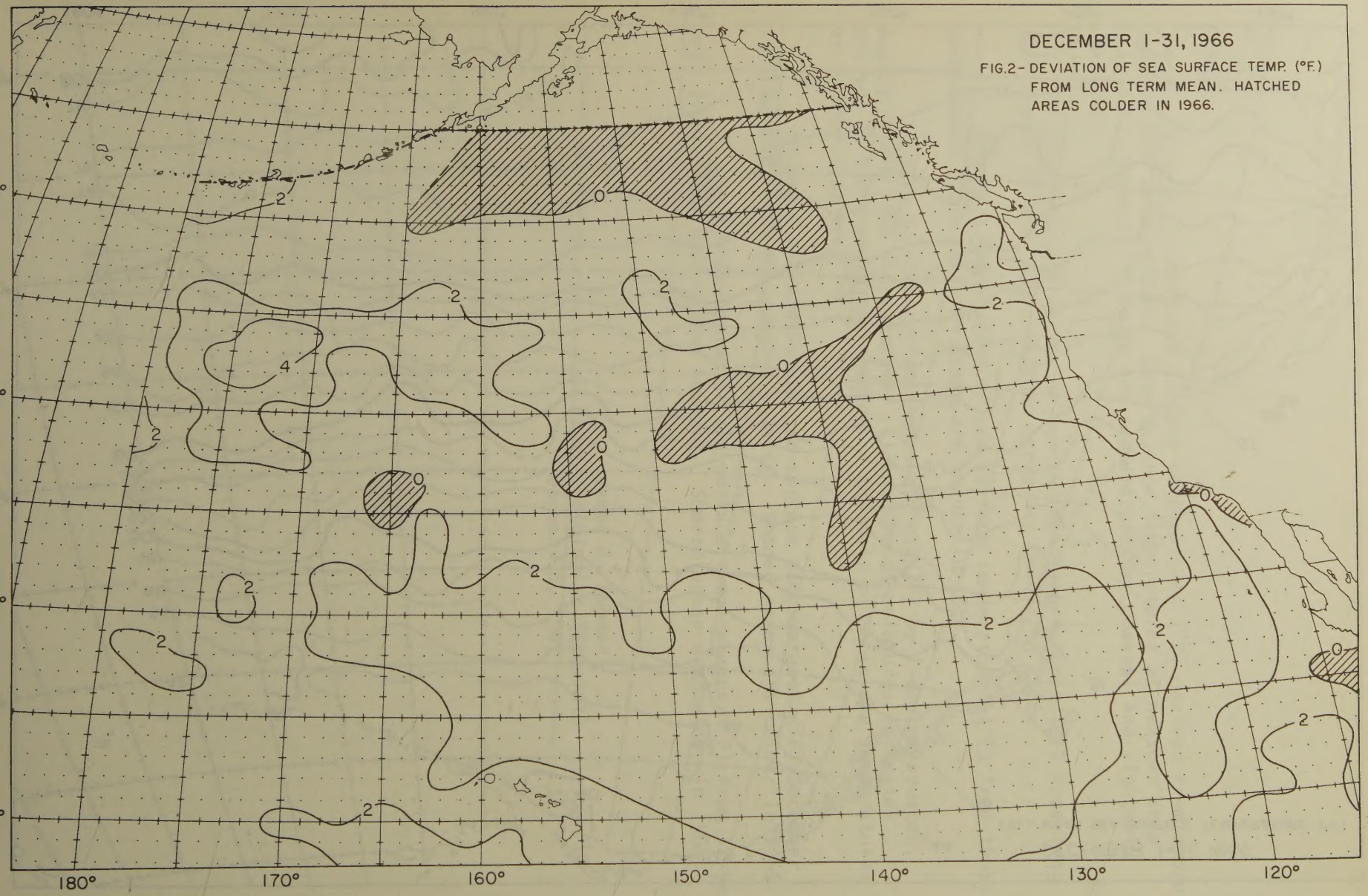
Figure 4.--Sea surface temperatures (°F) by 1-degree squares, approximately 3000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal stations.

Figure 5.--Deviation of sea surface temperatures (°F) December 1966-December 1965 by 1-degree squares. Shaded areas are colder in 1966.

Figure 6.--Deviation of sea surface temperatures (°F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas are colder in 1966.

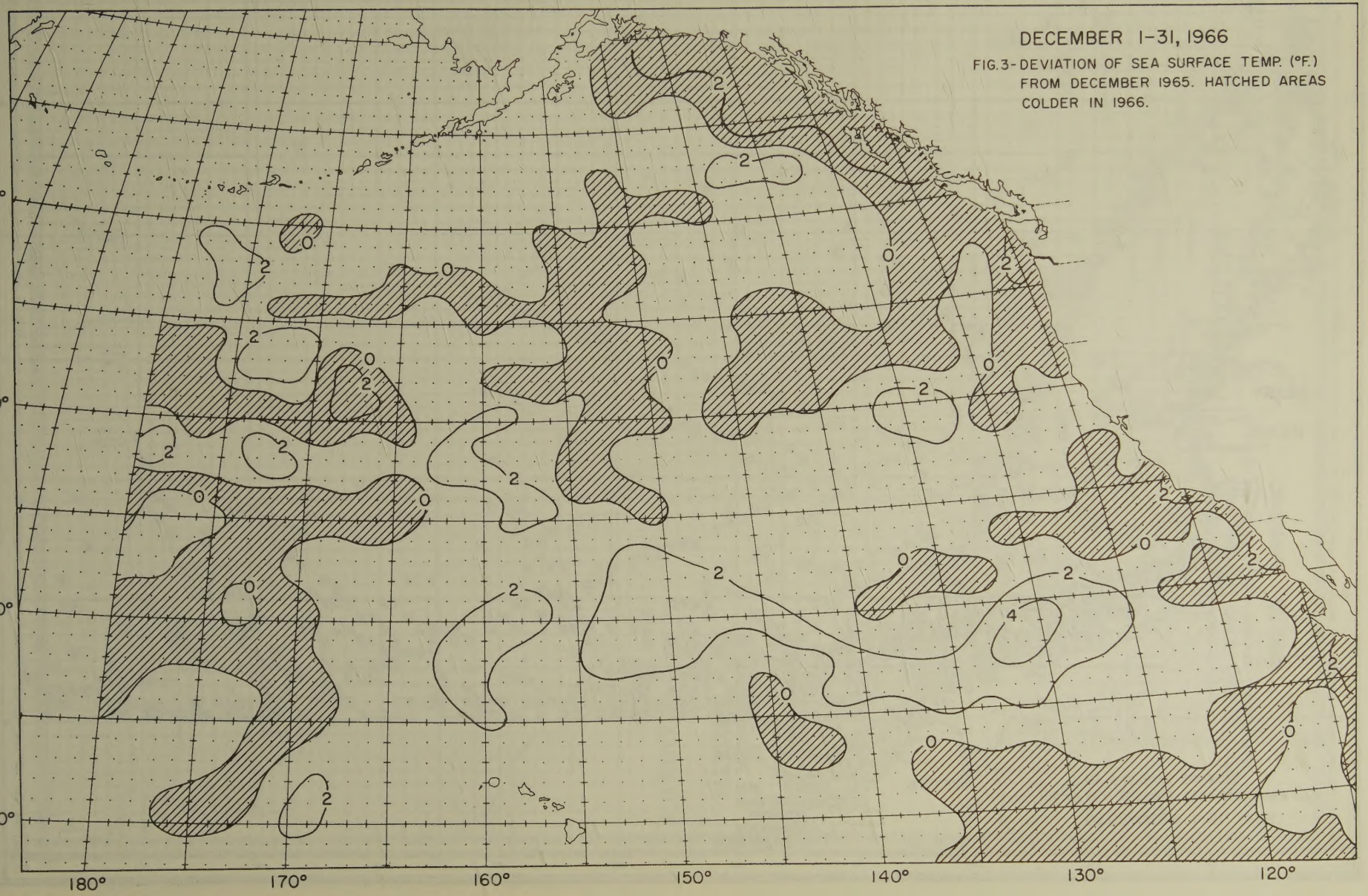
James A. Renner
Fishery Biologist (General)
January 6, 1967

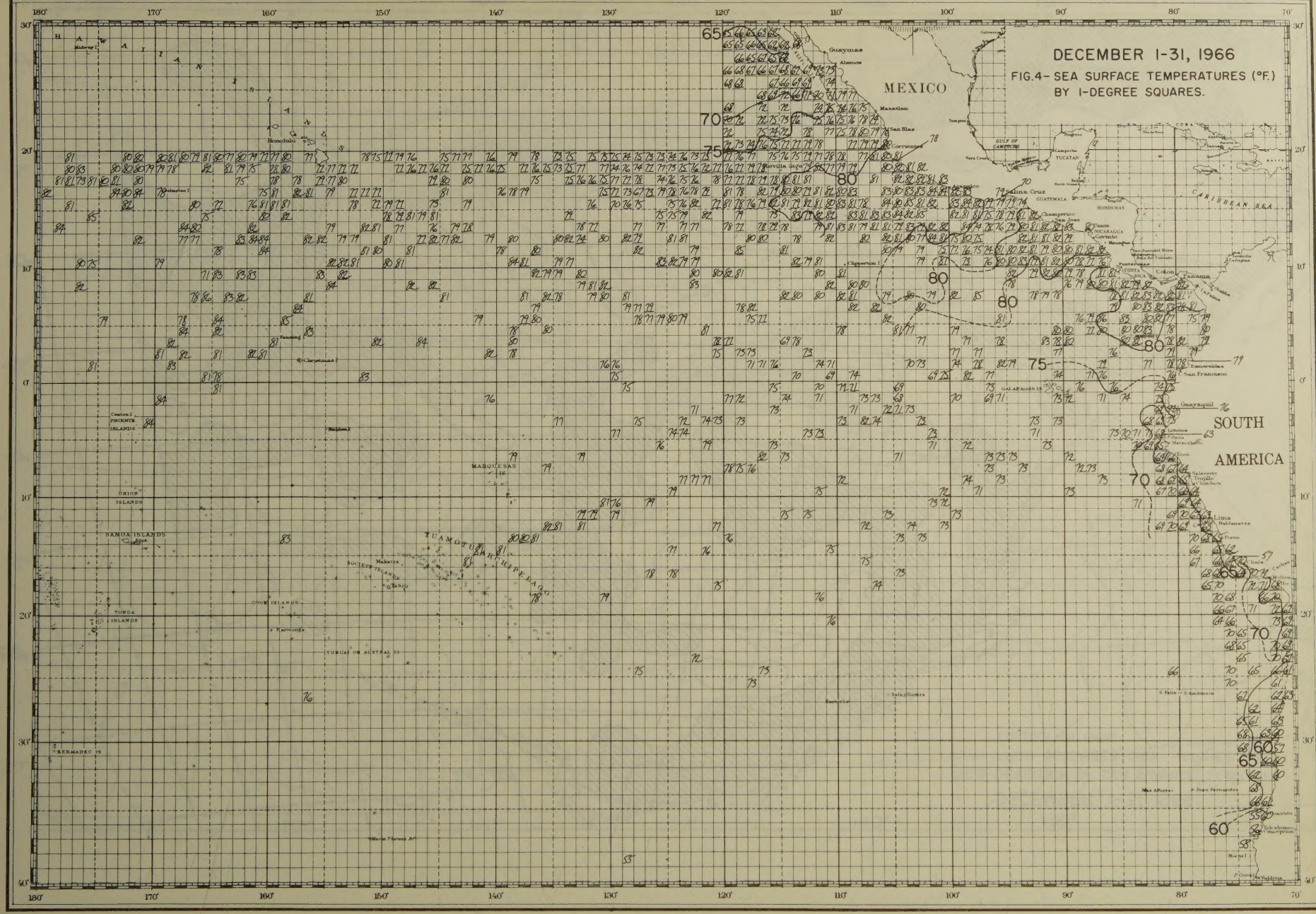

DECEMBER 1-31, 1966
FIG. 1-MEAN SEA SURFACE TEMPERATURE (°F.)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°

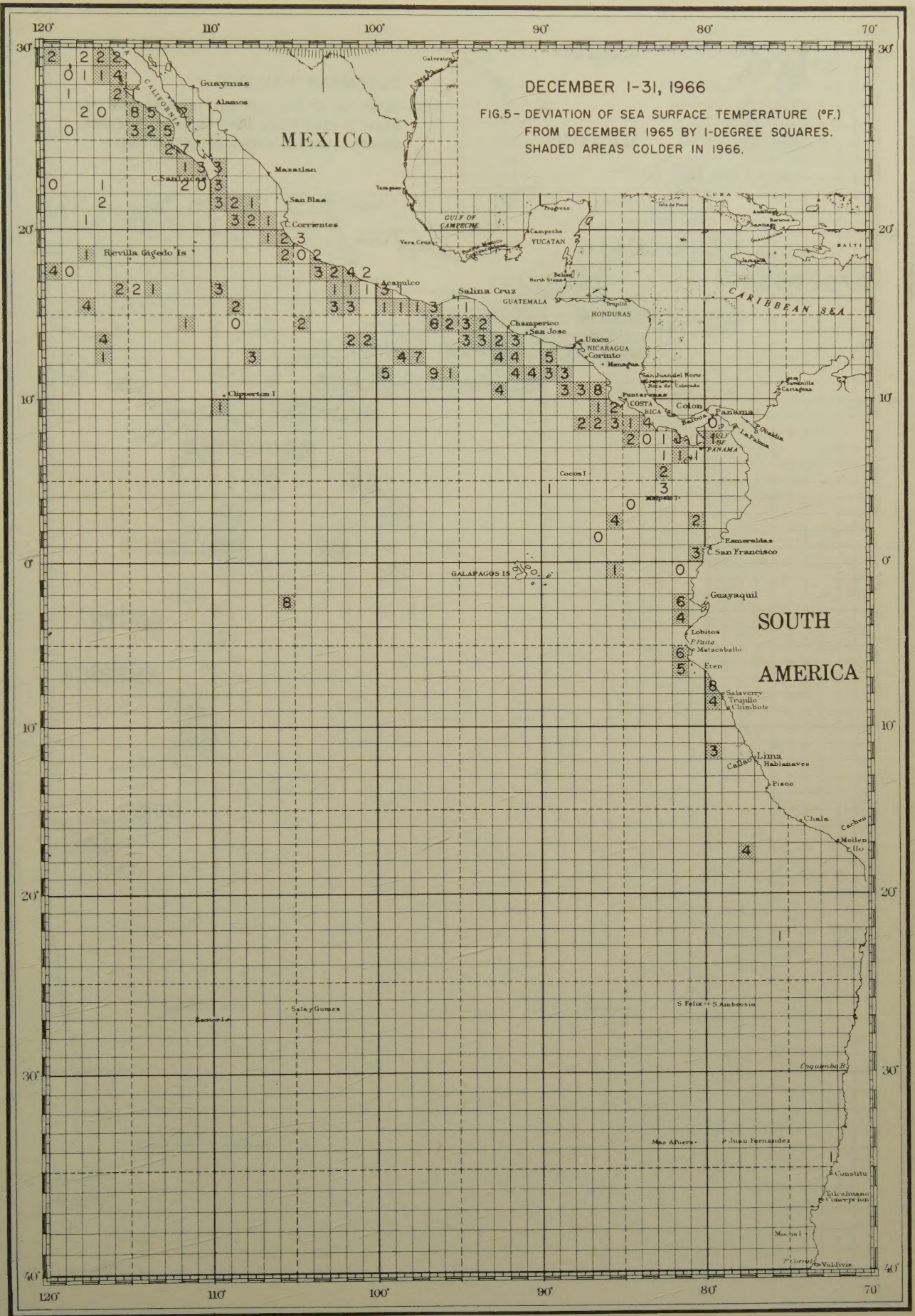


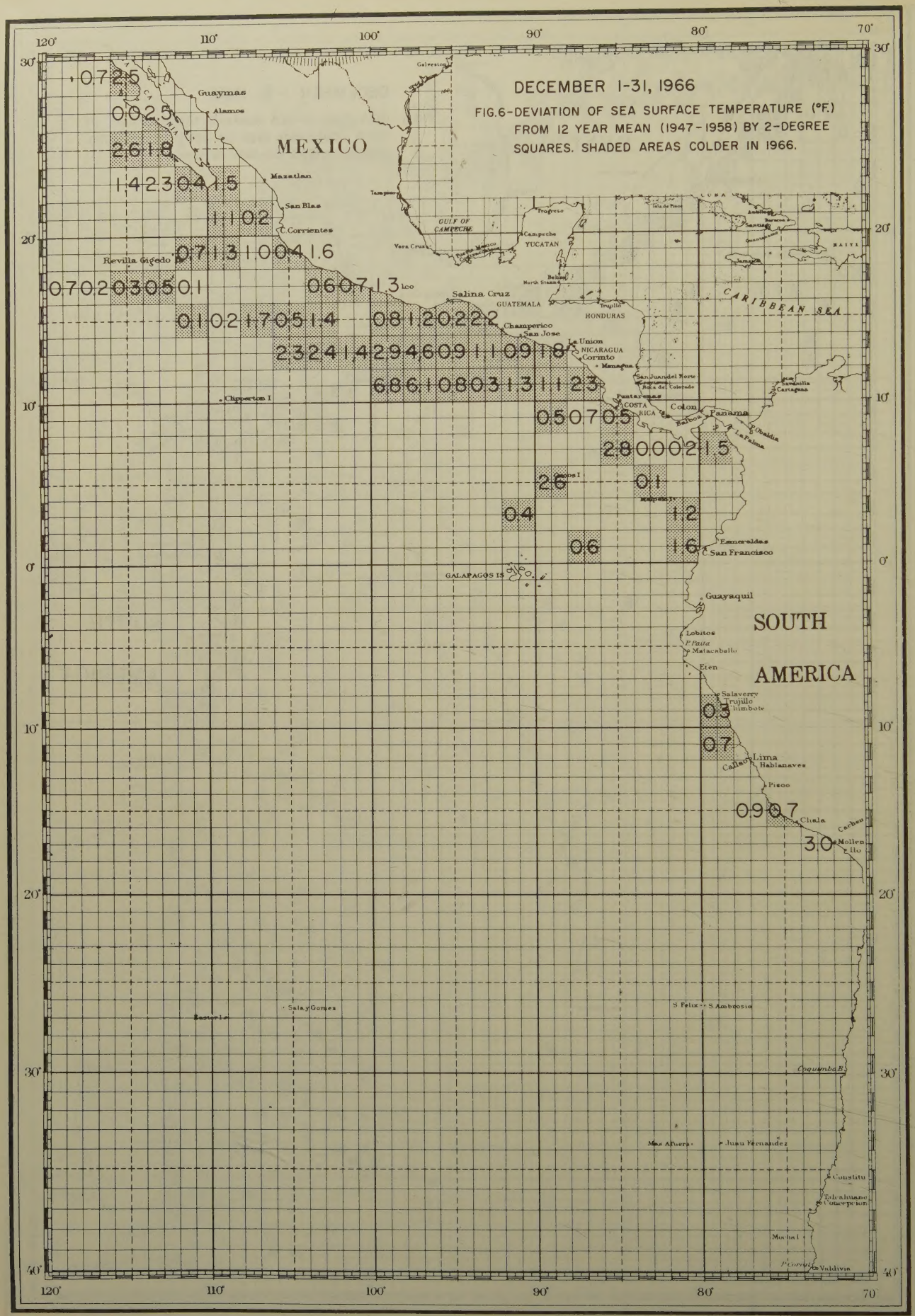
DECEMBER 1-31, 1966

FIG.2- DEVIATION OF SEA SURFACE TEMP. (°F.) FROM LONG TERM MEAN. HATCHED AREAS COLDER IN 1966.


DECEMBER 1-31, 1966
FIG.3-DEVIATION OF SEA SURFACE TEMP. (°F.) FROM DECEMBER 1965. HATCHED AREAS COLDER IN 1966.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


DECEMBER 1-31, 1966
FIG.4- SEA SURFACE TEMPERATURES (°F.)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
CARIBBEAN SEA
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
PANAMA
GALAPAGOS IS
MARQUESAS
TUAMOTU ARCHIPELAGO
SOCIETY ISLANDS
COOK ISLANDS
SAMOA ISLANDS
UNION ISLANDS
TONGA ISLANDS
KERMADEC IS
TUBUAI OR AUSTRAL IS
Honolulu
Midway I
Christmas I
Canton I
Fanning
Palmyra
Guaymas
Mazatlan
San Blas
Acapulco
Salina Cruz
Champerico
Corinto
Balboa
Colon
Guayaquil
Salaverry
Callao
Lima
Valparaiso
Juan Fernandez
Easter I
Tahiti
Raiatea
Rarotonga
Pago Pago
Apia
Nandi
Suva
Noumea
Auckland
Wellington
Sydney
Melbourne
Adelaide
Perth
Darwin
Port Moresby
Manila
Guam
Yokohama
Tokyo
Shanghai
Hong Kong
Singapore
Bombay
Karachi
Aden
Suez
Alexandria
Naples
Gibraltar
Lisbon
Dakar
Monrovia
Accra
Lagos
Capetown
Durban
Mauritius
Reunion
Madagascar


DECEMBER 1-31, 1966
FIG.5- DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM DECEMBER 1965 BY 1-DEGREE SQUARES. SHADED AREAS COLDER IN 1966.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GULF OF PANAMA
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
YUCATAN
CUBA
HAITI
JAMAICA
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo Is
Acapulco
Salina Cruz
Champerico
San Jose
La Union
Corinto
Managua
Chipperton I
Cocos I
GALAPAGOS IS
Sala y Gomez
Easter I
Guayaquil
Lobitos
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Cachau
Mollendo
Pillo
S Felix
S Ambrosio
Juan Fernandez
Mas Afuera
Valdivia
Esmeraldas
San Francisco
Panama
Colon
Cartagena
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°
40°


DECEMBER 1-31, 1966
FIG.6-DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1966.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
GALAPAGOS IS
YUCATAN
CUBA
HAITI
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Salina Cruz
Champerico
San Jose
Corinto
Managua
Panama
Colon
Guayaquil
Lobitos
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Pisco
Chala
Mollendo
Arica
Iquique
Antofagasta
Coquimbo
Valparaiso
Constitucion
Talcahuano
Corral
Valdivia
Juan Fernandez
Mas Afuera
S. Felix
S. Ambrosio
Easter I.
Sala y Gomez
Clipperton I
Galapagos I
Esmeraldas
San Francisco
Tampico
Progreso
Campeche
Vera Cruz
Belize
Trujillo
Puerto Limon
Cartagena
Aruba
Curacao
Jamaica
Santiago
Barranquilla
Maracaibo
Isla de Pinos
Galveston
Rivilla Gigedo
0.7 2.5
0.0 2.5
2.6 1.8
1.4 2.3 0.4 1.5
1.1 0.2
0.7 1.3 1.0 0.4 1.6
0.7 0.2 0.3 0.5 0.1
0.6 0.7 1.3
0.1 0.2 1.7 0.5 1.4
0.8 1.2 0.2 2.2
2.3 2.4 1.4 2.9 4.6 0.9 1.1 0.9 1.8
6.8 6.1 0.8 0.3 1.3 1.1 2.3
0.5 0.7 0.5
2.8 0.0 0.2 1.5
2.6
0.1
0.4
1.2
0.6
1.6
0.5
0.7
3.0
0.9 0.7
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°
40°